

**ABSTRACT OF THE DISCLOSURE**  
**NETWORK ACCESS SYSTEM INCLUDING A PROGRAMMABLE**  
**ACCESS DEVICE HAVING DISTRIBUTED SERVICE CONTROL**

5           A distributed network access system in accordance with the present invention includes at least an external processor and a programmable access device. The programmable access device has a message interface coupled to the external processor and first and second network interfaces through which packets are communicated with a network. The programmable access device includes a  
10           packet header filter and a forwarding table that is utilized to route packets communicated between the first and second network interfaces. In response to receipt of a series of packets, the packet header filter in the programmable access device identifies messages in the series of messages upon which policy-based services are to be implemented and passes identified messages via the message  
15           interface to the external processor for processing. In response to receipt of a message, the external processor invokes service control on the message and may also invoke policy control on the message.